PTO/SB/08A (04-03)

Approved for use through 04/30/2003. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Undertitle Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A-B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known						
Application Number	10/561,121					
Filing Date	May 23, 2006					
First Named Inventor	Alexander Deiters					
Group Art Unit	165 <b>2</b> 6					
Examiner Name	thassigned Kagnew Gebreyesus					
Attorney Docket Number	54-000251US					
Date Submitted	August 31, 2006					

U.S. PATENT DOCUMENTS							
	U.S. Patent Doc	ument	Name of Patentee or Applicant of	Date of Publication of	Pages, Columns, lines,		
Cite No.	Number	Kind Code (if known)	Cited Document	Cited DocumentMM-DD-YYYY	Where Relevant Passages or Relevant Figures Appeal		
			. (				
		Cite Number	Cite U.S. Patent Document  Kind Code	Cite U.S. Patent Document Name of Patentee or Applicant of Cited Document	Cite		

		Foreign Patent Document			N PATENT DOCUMENT	Date of Publication	Pages, Columns, Lines,	Т
Examiner Initials	Cite No.	Office	Number	Kind Code (if known)	Name of Patentee or Applicant of Cited Document	of Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear	Т
•	1	wo	2002/086075		The Scripps Research Institute	10-31-2002		
	2	wo	2002/085923		The Scripps Research Institute	10-31-2002		

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Т
	3	Anderson et al., (2002) Exploring the Limits of Codon and Anticodon Size, Chemistry and Biology, 9:237-244	
	4	Blake (2001) Cellular screening assays using fluorescence microscopy Curr. Opin. Pharmacol., 1:533-539	
	5	Bolletta, F. et al., (1996) <i>Synthesis and Photophysical Properties of Fluorescent Derivatives of Methylmercury</i> , Organometallics 15:2415-17	
	6	Carboni, B et al., (1993) Aliphatic Amino Azides as Key Building Blocks for Efficient Polyamine Syntheses, J. Org. Chem. 58:3736-3741	
	7	Chin et al., (2002), Addition of p-Azido-L-phenylalanine to the Genetic code of Escherichia coli, J. Am. Chem. Soc. 124:9026-9027	
	8	Chin and Schultz, (2002), In vivo Photocrosslinking with Unnatural Amino Acid Mutagenesis, Chem BioChem 11:1135-1137	
	9	Chin, et al., (2002), Addition of a Photocrosslinker to the Genetic Code of Escherichia coli, Proc. Natl. Acad.Sci. U. S. A. 99:11020-11024	
	10	Chin, et al., (2003) Progress toward an expanded eukaryotic genetic code, Chem. Biol., 10(6):511-519	
-	11	Chin, et al., (2003) An expanded eukaryotic genetic code, Science, 301(5635):964-7	

Examiner	Date	
Signature	Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

PTO/SB/08A (04-03)

Approved for use through 04/30/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
o a collection of information unless it contains a valid OMB control number.

	Under the Paperwork Reduction Act of 1995, no persons a	re required to respond to a collection of	Information driess it contains a valid Civib control number.		
	Substitute for form 1449A-B/PTO	Complete if Known			
		Application Number	10/561,121		
	INFORMATION DISCLOSURE	Filing Date	May 23, 2006		
	STATEMENT BY APPLICANT	First Named Inventor	Alexander Deiters		
		Group Art Unit	1652 6		
	·	Examiner Name	Unassigned Kagnew Gebreyesus		
	(use as many sheets as necessary)	Attorney Docket Number	54-000251US		
		Date Submitted	August 31, 2006		

12	Cornish, et al., (1996) Site-Specific Protein Modification Using a Ketone Handle, Journal of the American Chemical Society 118:8150-8151
13	Crisp, G. T.; & Gore, J. (1997) <i>Preparation of Biological Labels with Acetylenic Linker Arms,</i> <u>Tetrahedron</u> 53:1505-1522
14	Feng et al., (2003), Expanding tRNA recognition of a tRNA synthetase by a single amino acid change, PNAS 100(10): 5676-5681.
15	Forster et al., (2003) <i>Programming peptidomimetic synthetases by translating genetic codes designed de novo</i> PNAS 100(11):6353-6357
16	Francklyn et al., (2002), <i>Aminoacyl-tRNA synthetases: Versatile players in the changing theater of translation</i> ; RNA, 8:1363-1372
17	Griffin, et al., (1998) Specific covalent labeling of recombinant protein molecules inside live cells, Science 281:269-272.
18	Hamano-Takaku et al., (2000) A mutant Escherichia coli Tyrosyl-tRNA Synthetase Utilizes the Unnatural Amino Acid Azatyrosine More Efficiently than Tyrosine, Journal of Biological Chemistry, 275(51):40324-40328
19	Kiga et al. (2002), An engineered Escherichia coli tyrosyl-tRNA synthetase for site-specific incorporation of an unnatural amino acid into proteins in eukaryotic translation and its application in a wheat germ cell-free system, PNAS 99(15): 9715-9723 pages 21-23 missi
20	Kiick et al., (2002) Incorporation of azides into recombinant proteins for chemoselective modification by the Staudinger ligitation, PNAS 99:19-24
21	Lemineux, & Bertozzi, (1996) Chemoselective ligation reactions with proteins, oligosaccharides and cells, TIBTECH, 16:506-513
22	Liu, D.R. & Schultz, P.G. (1999) Progress toward the evolution of an organism with an expanded genetic code. PNAS United States 96:4780-4785
23	Magliery, (2001) Expanding the Genetic Code: Selection of Efficient Suppressors of Fourbase Codons and Identification of "Shifty" Four-base Codons with a Library Approach in Escherichia coli, J. Mol. Biol. 307: 755-769
24	Mahal, et al., (1997) Engineering chemical reactivity on cell surfaces through oligosaccharide biosynthesis, Science, 276:1125-1128
25	Padwa, A. (1991) Intermolecular 1,3-Dipolar Cycloaddtions in Comprehensive Organic Synthesis, Vol. 4, Ed. Trost, B. M., Pergamon, Oxford, p. 1069-1109
26	M. Pasternak, et al., (2000), A new orthogonal suppressor tRNA/aminoacyl-tRNA synthetase pair for evolving an organism with an expanded genetic code, Helvetica Chemica Acta 83:2277
Examiner   Signature	Date Considered

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

PTO/SB/08A (04-03)

Approved for use through 04/30/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE o a collection of information unless it contains a valid OMB control number.

	Under the Paperwork Reduction Act of 1995, no persons		information unless it contains a valid Civib control number.
	Substitute for form 1449A-B/PTO	C	omplete if Known
		Application Number	10/561,121
	INFORMATION DISCLOSURE	Filing Date	May 23, 2006
İ	STATEMENT BY APPLICANT	First Named Inventor	Alexander Deiters
		Group Art Unit	165 <b>2</b> <sup>6</sup>
		Examiner Name	Umassigmed Kagnew Gebreyesus
	(use as many sheets as necessary)	Attorney Docket Number	54-000251US
		Date Submitted	August 31, 2006

27	Rostovtsev, et al., (2002) A stepwise Huisgen cycloaddition process: copper(I)-catalyzed regioselective "ligation" of azides and terminal alkynes, Angew. Chem. Int. Ed. 41:2596-2599	
28	Speers, et al., (2003) Activity-based protein profiling in vivo using a copper(i)-catalyzed azide-alkyne [3 + 2] cycloaddition, J. Am. Chem. Soc., 125:4686-4687	
29	Tornøe, et al., (2002) Peptidotriazoles on solid phase: [1,2,3]-triazoles by regiospecific copper(i)-catalyzed 1,3-dipolar cycloadditions of terminal alkynes to azides, Org. Chem. 67:3057-3064	
30	Wang, et al., (2001), Expanding the genetic code of Escherichia coli, Science 292:498-500	
31	Wang, et al., (2002), Adding L-3-(2-naphthyl)alanine to the genetic code of E-coli, J. Am. Chem. Soc. 124:1836-1837	
32	Wang and Schultz, (2002), Expanding the Genetic Code, Chem. Comm. 1-10	
33	Wang, et al., (2003) Addition of the keto functional group to the genetic code of Escherichia coli, Proc. Natl. Acad. Sci., 100:56-61	
34	Wang, et al., (2003) Bioconjugation by copper(I)-catalyzed azide-alkyne [3 + 2] cycloaddition. J. Am. Chem. Soc., 125:3192-3193	
35	Wouters, et al., (2001) Imaging biochemistry inside cells, Trends in Cell Biology 11:203-211	
36	Zacharias, et al., (2000) Recent advances in technology for measuring and manipulating cell signals, Curr. Opin. Neurobiol., 10:416-421	
37	Zhang et al., (2002), The selective incorporation of alkenes into proteins in Escherichia coli, Angewandte Chemie. International Ed. in English 41:2840-2842	
38	Zhang, et al., (2003) A new strategy for the site-specific modification of proteins in vivo, Biochemistry, 42:6735-6746	

Examiner Signature	/Kagnew Gebreyesus/	Date Considered	10/19/2008	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.